

June 25, 2004

The following is submitted in response to the comments raised by the Commerce Information Technology Review Board following the June 10th NPOESS Data Exploitation Briefing (NDE).

1. Basis for Investment

Comment 1a. Planning and budgeting for NDE, Comprehensive Large Array-Data Stewardship System (CLASS) and other NWS initiatives for end-end use of satellite data should have been handled as part of the comprehensive NPOESS system review, not handled piecemeal years after the joint NOAA-Defense-NASA NPOESS plan was reviewed and approved.

Response 1a: In 2001, prior to the award of the NPOESS contract, senior managers within NOAA reached an agreement on the scope of the NPOESS mission. The agreement was for the NPOESS program to deliver all NPOESS products in one format. Because there are a variety of NOAA customers who assimilate environmental data in different formats, there is a need to convert the NPOESS data to produce a better product. The outcome of the agreement supports the current architecture which leverages the existing expertise within several NOAA offices to provide value-added NPOESS products to NOAA customers (NDE), store NPOESS data and establish an on-line data access capability (CLASS), and develop a state-of-the art Joint Center for Satellite Data Assimilation (NWS/JCSDA). Unlike CLASS and JCSDA, the NDE Project is the only initiative that will work exclusively with NPOESS data, thereby focusing on explicit product quality goals that are tied to NPOESS performance metrics.

Comment 1b. Customers should pay for infrastructure.

Response 1b: For NDE the primary customer of NPOESS observations is NOAA. NDE funding is required to provide the vital link between the NPOESS and NOAA customers. Funding is also necessary for NDE to produce the value-added products for NWS, NOS and OAR. If multiple NOAA customers have to pay for the products DOC would receive multiple requests for funds vice the one request from NESDIS. In addition, many products have multiple use customers so there would be an issue as to who would pay to address the needs of the many customers. Having multiple funding requests would be an inefficient way to handle the issue. Without funding, the NPP and NPOESS observations and products will not be delivered, negating any return on the enormous NPOESS investment.

2. Program Management

Comment 2: Lacks plan for line offices to pay for the products they need.

Response 2: See answer to 1b above. One NDE goal is to minimize integration cost of NPOESS data into NOAA mission support capabilities by developing enterprise solutions. The Project Strategy is to assist customers to plan for incremental upgrades to their particular systems through an iterative development strategy that features a Customer Coordination phase. In the case NWS and NOS, much of the scalable infrastructure is already in place, or is planned to be in place, to ingest and process NPP and NPOESS data.

Currently, the NDE Project is collecting NPOESS product and service requirements from each of the NOAA Line Offices. The Project intends to use their input during the Customer Coordination phase to assist the Line Offices in planning the infrastructure improvements they will require to assimilate the NPOESS products.

3. Risk Management

Comment 3: It is not clear what happens if we don't do this.

Response 3: NOAA will be unable to use the majority of NPOESS data. NDE provides the vital link between the NPOESS mission and the NOAA user community. Without NDE, a return on the \$4.5 Billion NPOESS investment by the U.S. government will not be realized by NOAA and the rest of the civilian user community. The NOAA Line Offices who claim NPOESS data to be vital to their services, such as NWS and NOS, will not be able to improve many of their critical services to the public. These include enhance the accuracy of 3-5 day weather forecasts, detect oil spills and monitor their movement, identify volcanic eruptions and their associated ash plumes, pinpoint forest fires and smoke, and monitor the health of our coastlines.

4. IT Security

Comment 4: The security section of the Exhibit 300 is of poor quality, internally inconsistent and lacks current information.

Response 4: The security section of the Exhibit 300 will be updated with the latest information. NESDIS will develop for NDE the following suite of Certification and Accreditation (C&A) documents:

- a. Certification Statement with Request for Accreditation (Section II.B. of NIST FIPS-199 to re-evaluate system sensitivity for Confidentiality, Integrity and Availability.) signed by the ITSO
- b. Accreditation Statement signed by the System Owner
- c. Designated Approving Authority (DAA) signature. This is the NESDIS CIO who will authorize the system to operate.
- d. System Security Plan
- e. Exhibit 300 and 53

- f. Topology of System
- g. MOUs/MOAs which impact the system
- h. Risk Assessment Documents
 - + NIST SP 800-26 security self-assessment results and one of the automated tools/methods listed immediately below:
 - TS 2000 (unique to NOAA) Risk Assessment with graphs and TS2000RiskAssessementCover.pdf
 - Hydra Expert Assessment Technology (HEAT)
 - Facilitated Risk Analysis Process (FRAP)
- i. Security Test and Evaluation (ST&E) using: HARRIS STAT Specific Reports
- j. Contingency Plan
- k. Contingency Plan and test results
- l. IG Report Findings, recommendations and concurrence
- m. Other Independent Organization's Review/Audit Reports
- n. Plans of Action and Milestones with Requirements
- o. National Information Assurance Certification and Accreditation Methodology (NIACAP) converted to NIACAP Forms

5. Architecture Compliance

Comment 5: NOAA is replacing the satellite infrastructure one piece at a time; they should be using the architecture to evaluate the end-end impact.

Response 5: The NDE Project is using the NOAA Observing System Architecture as a model for developing the infrastructure necessary to provide vital services to NOAA. Key architectural NDE elements are recorded with the METIS enterprise architecture tool to ensure consistency between NDE and other NOAA observing systems.

6. Administration/Departmental Goals & Initiatives

Comment 6: A statement should be included concerning stating that non-government entities provide value added services.

Response 6: The following statement will be added to the Exhibit 300. There are several non-government organizations who are in the process of developing NPOESS field terminals that will free the user community from establishing a link to NDE. These stations will be used to receive NPOESS observations directly from the satellite as it passes overhead. Although the products generated by these terminals will be regional, they will be provided to these customers more quickly than NDE. There will be no need for the terminal owner to link to NDE. Companies such as Sea-Space, Northrop Grumman, Harris, and Integral Systems are developing these terminals in time for the first NPOESS launch.